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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,578	12/05/2005	Tomoyasu Murakami	050787	2692

23850 7590 02/28/2007  
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP  
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WASHINGTON, DC 20006

EXAMINER

REDDY, KARUNA P

ART UNIT	PAPER NUMBER
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1713

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/28/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/559,578

Applicant(s)

MURAKAMI ET AL.

Examiner

Karuna P. Reddy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/5/2005
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hara (EP 0 499 483 A1).

Hara discloses an anaerobic adhesive composition having a quick curing property and superior in preservability comprising a polymerizable acrylate ester, a) o-benzoic sulfimide b) an organic hydrazine compound and c) an organic peroxide (page 2, lines 16-18). The amount of organic hydrazine compound to be used is preferably in the range of 0.001 to 5 parts by weight based on 100 parts by weight of the polymerizable acrylate ester (page 2, lines 46-47). A too small an amount will result in decrease of the curing speed (page 2, lines 48-49). An example of the organic hydrazine includes isophthalic dihydrazide (page 2, lines 44-45). O-benzoic sulfimide is preferably used in an amount of 0.1 to 5 wt% (page 2, line 51). As the polymerizable acrylate ester there may be used a known one including polyacrylate esters and polyurethane acrylates. Examples of polyacrylate esters include di, tri or tetraethylene glycol dimethacrylate (page

3, lines 28-31). Particularly useful polymerization initiators are organic peroxides such as cumene hydroperoxide and t-butyl hydroperoxide (page 3, 45-46). Other useful polymerization initiators are carbonyl compounds, including acetophenone, benzophenone (page 3, lines 48-50). See example 1 and table 1, for an anaerobic adhesive composition where set time is less than 2 minutes and the adhesive is stable at room temperature for more than 1 year.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hara (EP 0 499 483 A1) in view of Naoki et al (JP 58-053,969).

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The discussion with respect to Hara in paragraph 2 is incorporated herein by reference.

The prior art is silent with respect to the viscosity of adhesive composition.

However, Naoki et al teach an adhesive made from polymerizing quickly a raw material having a viscosity of less than or equal to 10 poise at normal temperature, consisting essentially of acrylic monomer (abstract). Therefore, it would have been obvious to one skilled in the art at the time invention was made to use acrylates having a viscosity of less than 10 poise since a species of a genus will work properly, motivated by expectation of success.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hara (EP 0 499 483 A1) in view of Suzuki et al (JP 62-120,036).

The discussion with respect to Hara in paragraph 2 is incorporated herein by reference.

The prior art is silent with respect to water blocking treatment of electrical wire.

However, Suzuki et al teaches excellent moisture resistance by sealing an electronic part and then filling low viscosity adhesive in boundary between the lead frame and/or leads of the part and PPS. The adhesive includes for example urethane or cyanoacrylate and needs to sufficiently impregnate to fill the gap between the lead frame, the leads and PPS layer and accordingly has low viscosity. Therefore, it would have been obvious to one skilled in the art at the

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time invention was made to impregnate clearance between element wires of the electrical wire with anaerobic adhesive composition of Hara because Suzuki et al have proven successfully the impregnation with acrylate adhesive and one of ordinary skill in the art would have expected the impregnation using anaerobic adhesive composition of Hara to work, motivated by expectation of success.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karuna P. Reddy whose telephone number is (571) 272-6566.

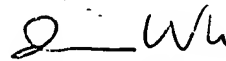
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

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free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Karuna P Reddy  
Examiner  
Art Unit 1713



DAVID W. WU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700